AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of analyzing a quantity having temporal and spatial variations, ~~wherein~~ including:

[[-]] obtaining a multidimensional output data array ~~is formed,~~ [[-]] the multidimensional output data array ~~comprises~~ comprising array positions arranged along at least a first data-axis and a second data-axis[[,]]; and

[[-]] receiving with a processor values corresponding to ~~of the~~ a quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system ~~are entered in the multidimensional output data array, such that~~;

wherein first [[-]] values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same instant in time are ~~entered~~ mapped by the processor to ~~at~~ respective positions in the multidimensional output data array at equal positions along the first data-axis, and [[-]] second values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same spatial position are mapped by the processor to ~~entered at~~ respective positions in the multidimensional output data array at equal positions along the second data-axis.

2. (Currently amended) The [[A]] method as claimed in Claim 1, ~~wherein~~ further including:

[[-]] acquiring the first and second values of the quantity ~~are acquired~~ for respective temporal instants and for respective spatial sections; and

[[-]] mapping the second values of the quantity for individual spatial sections ~~are entered at~~ to respective positions in the multidimensional output data array at equal positions along the second

data-axis.

3. (Currently amended) The [[A]] method as claimed in Claim 1, ~~wherein~~ further including [[-]] acquiring the first and second values of the quantity ~~are acquired~~ for respective time intervals and for respective spatial positions and mapping the first values of the quantity for individual time intervals ~~are entered at~~ to respective positions in the multidimensional output data array at equal positions along the first data-axis.

4. (Currently amended) The [[A]] method as claimed in Claim 1, ~~wherein~~ further including [[-]] mapping the first values of the quantity for successive time intervals ~~are entered at~~ to adjacent positions in the multidimensional output data array; and [[-]] mapping the second values of the quantity for adjacent spatial sections ~~are entered at~~ to adjacent positions in the multidimensional output data array.

5. (Currently amended) The [[A]] method as claimed in Claim 4, ~~wherein~~ further including mapping the second values of the quantity for radially contiguous spatial sections ~~are entered at~~ to contiguous positions in the multidimensional output data array.

6. (Currently amended) The [[A]] method as claimed in Claim 1, wherein the first and second values of the quantity are derived from [[a]] the time series ~~of~~ perfusion images.

7. (Currently amended) The [[A]] method as claimed in Claim [[6]]1, wherein the first values of the quantity at respective instants of time are derived from respective images in said time series ~~of~~ perfusion images.

8. (Currently amended) The [[A]] method as claimed in Claim 7, ~~wherein~~ further including linking respective positions in the multidimensional output data array ~~are linked~~ to respective spatial sections in respective images of the time series perfusion images.

9. (Currently amended) The [[A]] method as claimed in Claim 8, ~~wherein~~ further including:

displaying the multidimensional output data array ~~is displayed~~[[,]];

[[-]] indicating a position in the displayed multidimensional output data array ~~is indicated;~~ and

[[-]] displaying the respective image of the time series perfusion images on the basis of the respective indicated position in the displayed multidimensional output data array ~~the corresponding image of the series is displayed~~ and marking the ~~corresponding~~ respective spatial section in the image ~~is marked~~.

10. (Currently amended) The [[A]] method as claimed in Claim 1, wherein the quantity pertains to perfusion of the myocardium.

11. (Currently amended) A data processing system adapted to analyze a quantity having temporal and spatial variations, the system comprising: ~~being arranged to~~

[[-]] ~~form~~ a processor that obtains a multidimensional output data array, [[-]] the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data-axis and that receives [[-]] ~~enter~~ values corresponding to ~~of the~~ a quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system ~~in the multidimensional output data array, such that~~;

wherein [[-]] first values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same instant in time are mapped by the processor to ~~entered at~~ respective positions in the multidimensional output data array at equal positions along the first data-axis, and [[-]] second values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same spatial position are ~~entered~~ mapped by the processor to ~~at~~ respective positions in the multidimensional output data array at equal positions along the second data-axis.

12. (Currently amended) A computer-readable ~~data carrier~~ medium having stored therein [[a]] computer ~~program comprising one or more~~ executable instructions that when executed on a computer, cause the computer to:

[[-]] ~~form~~ obtain a multidimensional output data array, [[-]] the multidimensional output data array comprising array positions arranged along at least a first data-axis and a second data-axis; [[-]] receive ~~enter~~ values corresponding to ~~of the~~ a quantity indicative of blood perfusion through tissue based on time series perfusion images generated from image data acquired by a tomographic imaging system ~~in the multidimensional output data array, such~~;

wherein first ~~that~~[[-]] values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same instant in time are mapped to ~~entered at~~ respective positions in the multidimensional output data array at equal positions along the first data-axis, and [[-]] second values corresponding to ~~of~~ the quantity at substantially ~~the~~ a same spatial position are mapped to ~~entered at~~ respective positions in the multidimensional output data array at equal positions along the second data-axis.

13. (Previously Presented) The method of claim 1, further comprising displaying the multidimensional output data array.

14. (Currently amended) The method of claim 13, wherein the values of the quantity are derived from the image data, and further comprising displaying the image data while displaying the multidimensional output data array.

15. (Currently amended) The method of claim 1, wherein the quantity is an average brightness value of the image data.

16. (Previously presented) The method of claim 15, wherein the image data comprises perfusion data of a human myocardium.

17. (Previously presented) The system of claim 11, further comprising a display device adapted to display the multidimensional output data array.

18. (Currently amended) The system of claim 17, wherein the values of the quantity are derived from the image data, and wherein the display device is further adapted to display the image data while displaying the multidimensional output data array.

19. (Currently amended) The system of claim 11, wherein the quantity is an average brightness value of the image data.

20. (Previously presented) The system of claim 19, wherein the image data comprises perfusion data of a human myocardium.